

Safe Target System 2.0 (STS) User's Manual

By: AimTech Systems

Revision 2.0

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Warning! This system is designed to be used with a laser insert while dry firing an UNLOADED firearm. Remove all ammunition from the area training will take place to ensure safety. Any time the firearm is picked up it should be checked and cleared before training. It is best to have a second person confirm the firearm is clear of any ammunition. Always treat a firearm as if it is loaded and keep it pointed in a safe direction.

Introduction

This document will describe all the functions and how to use the Safe Target System (STS) from AIMTech Systems. The STS system is designed to allow you to safely practice marksmanship skills without going to the range or the safety concerns of live weapons. The STS system is designed to be used with the Dry Fire Laser Inserts from AimTech Systems.

Caution! Always ensure that any firearm being used with this system's dry fire laser is unloaded! Also, when handling real firearms always consider them to be loaded and always follow the same safety rules you would at a live range!

Loading the Software

This section will cover how to load the STS software to your Windows XP or 7 computer.

1. Locate the provided STS software disk that came with the system.
2. Insert the disk, label side up, into the computers DVD ROM drive and close the drive.
3. Wait a moment for the installer to auto launch. (If the software does not auto launch manually navigate to the DVD drive and double click to open the DVD content. Double Click on the SetupSTS.exe to launch the installer.)
4. If the following warning is displayed select Yes.

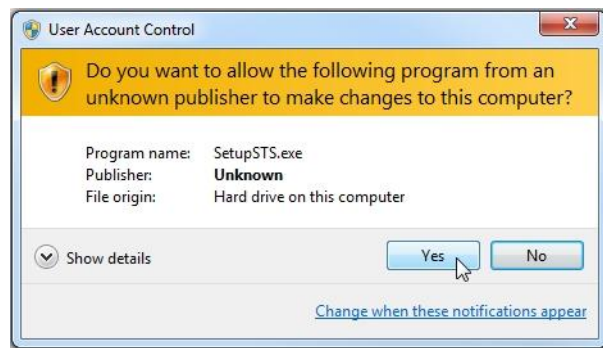


Figure 1

5. Click Next



Figure 2

6. Read the license agreement and select "I accept the agreement" then click Next.

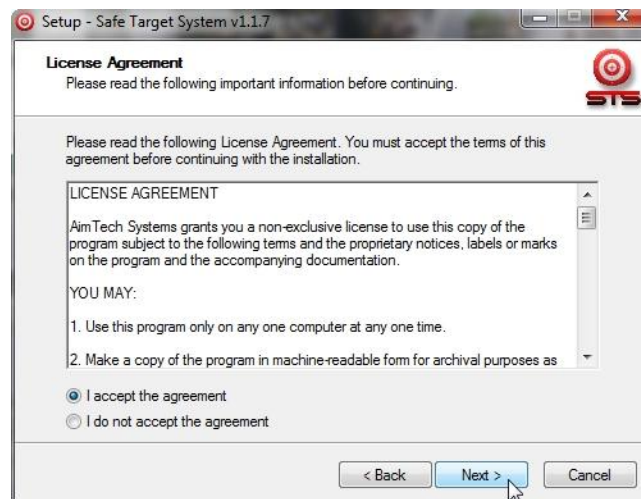


Figure 3

7. Click Next

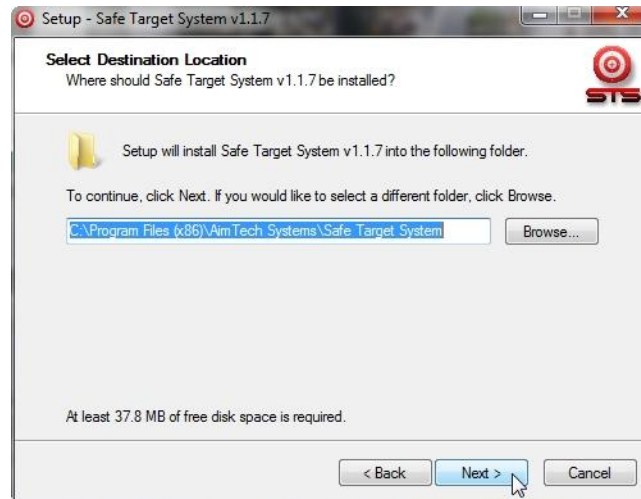


Figure 4

8. Click Next



Figure 5

9. Click Next

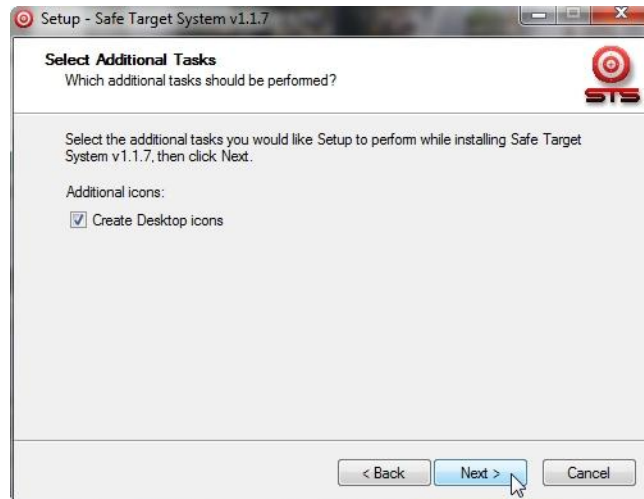


Figure 6

10. Please wait a moment while the STS files are loaded.

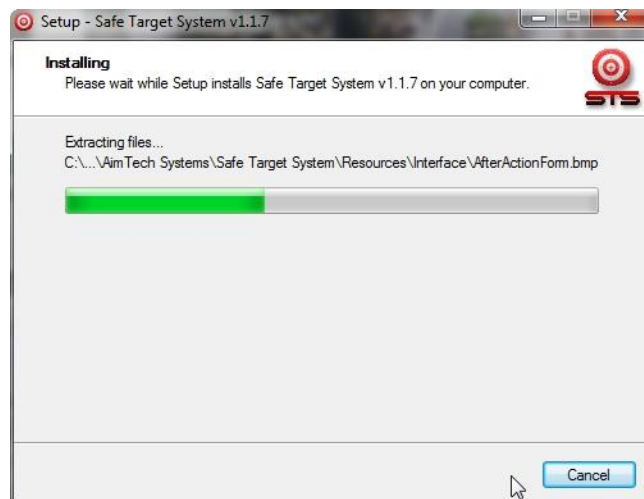


Figure 7

11. The software will now install supporting software required to run the STS software. Ensure all 3 options are selected and click Finish.



Figure 8

12. Please wait while the Logitech software unpacks.
13. Once the Logitech software is finished unpacking 3 installer windows will be presented waiting to be installed. Install them one at a time starting with the Microsoft Visual C++. Click yes to begin this install.

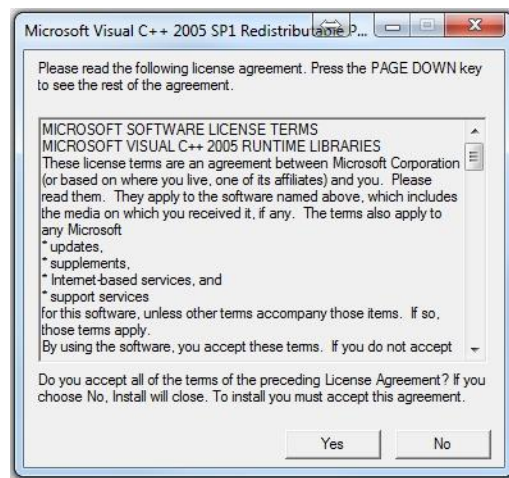


Figure 9

14. Wait while the software is loaded. Once done it will close automatically.

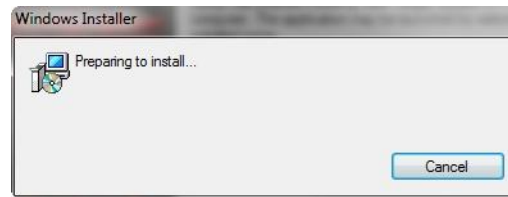


Figure 10

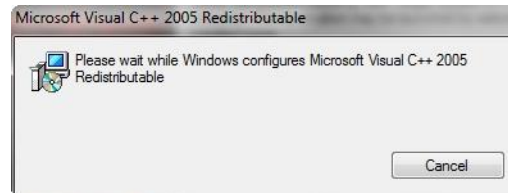


Figure 11

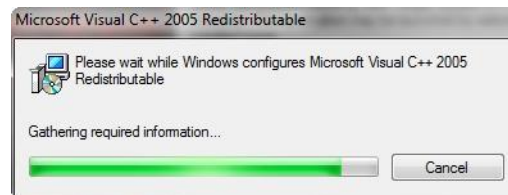


Figure 12

15. Now move on to the Microsoft DirectX installer. Select I accept the agreement and click Next.



Figure 13

16. Click Next.

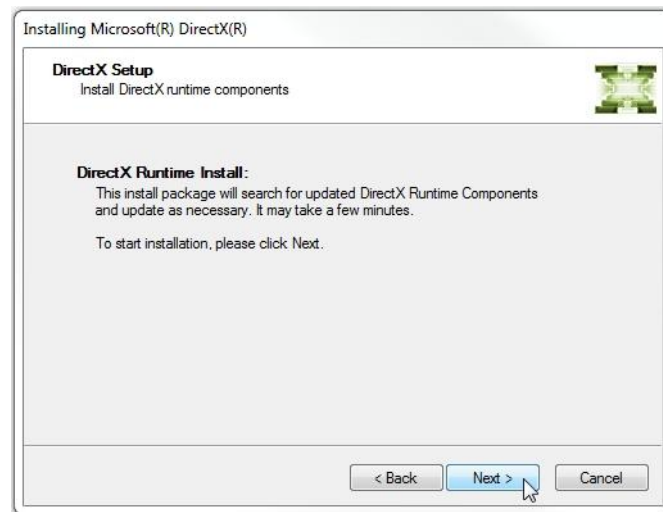


Figure 14

17. Wait while the software is loaded. This may take several minutes.

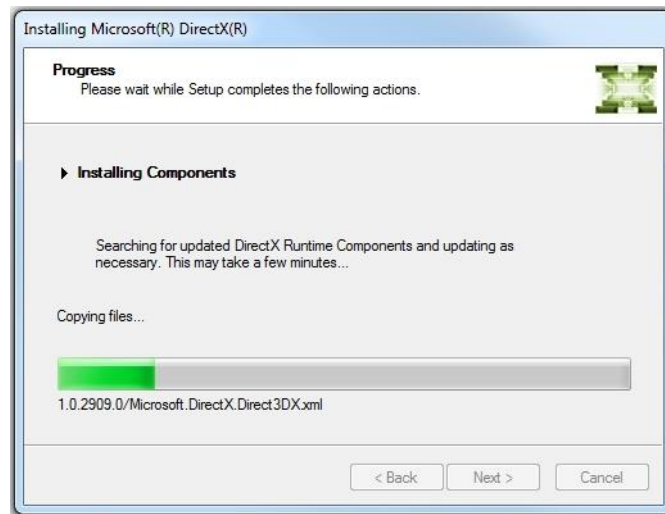


Figure 15

18. Click Finish.

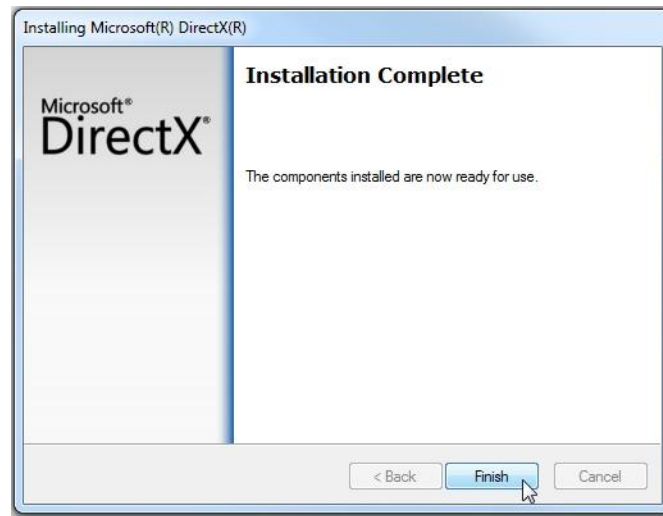


Figure 16

19. Now move on to the Logitech Webcam Software. Click Next to begin installing.

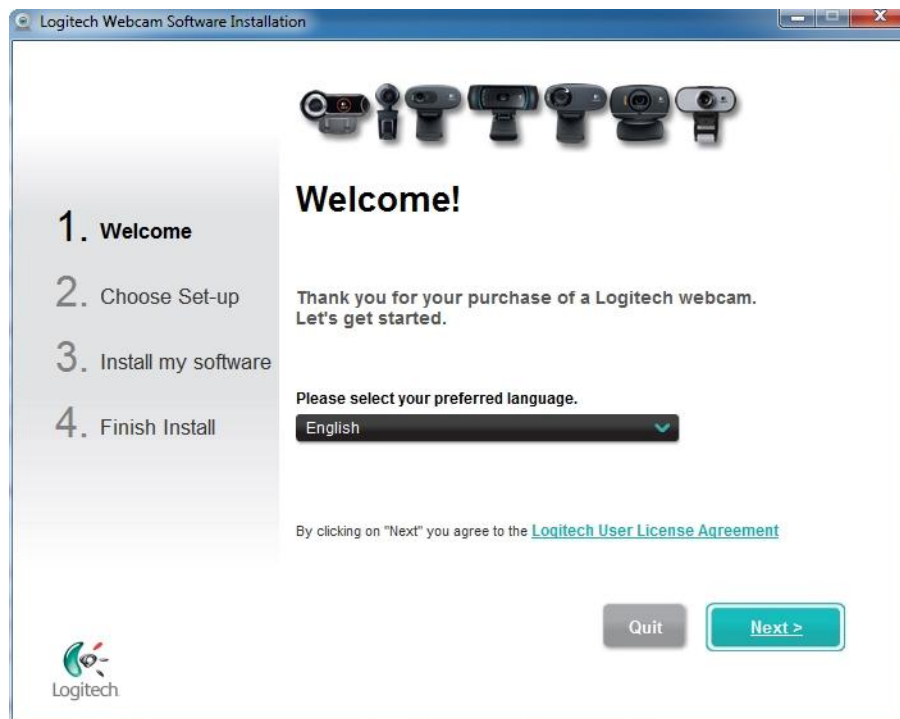


Figure 17

20. Connect the Tracking Camera USB cable to an open USB port on your computer.

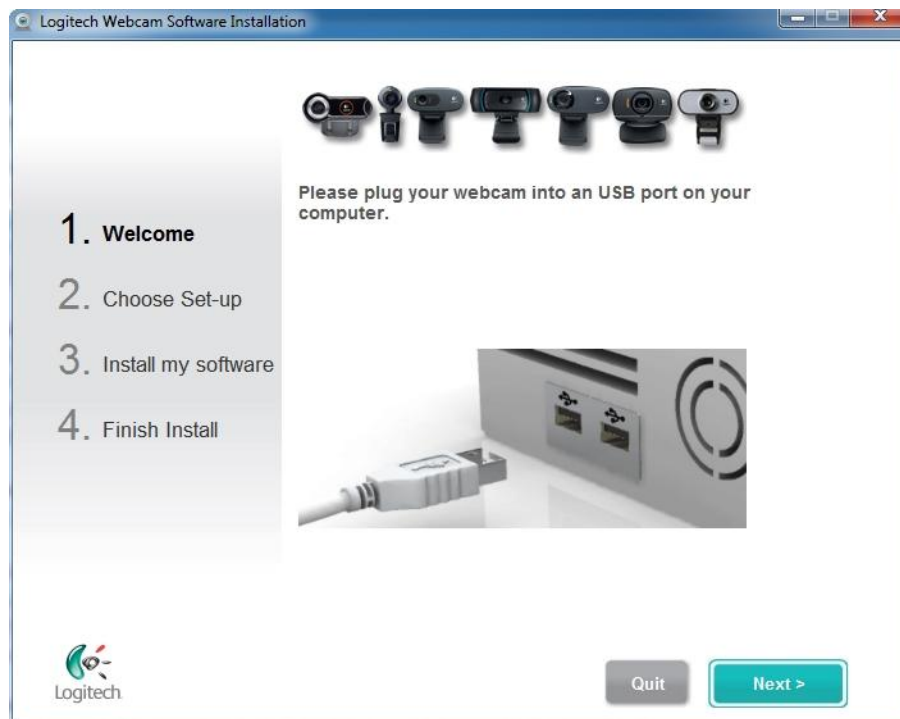


Figure 18

21. Wait while the software connects to the Tracking camera.

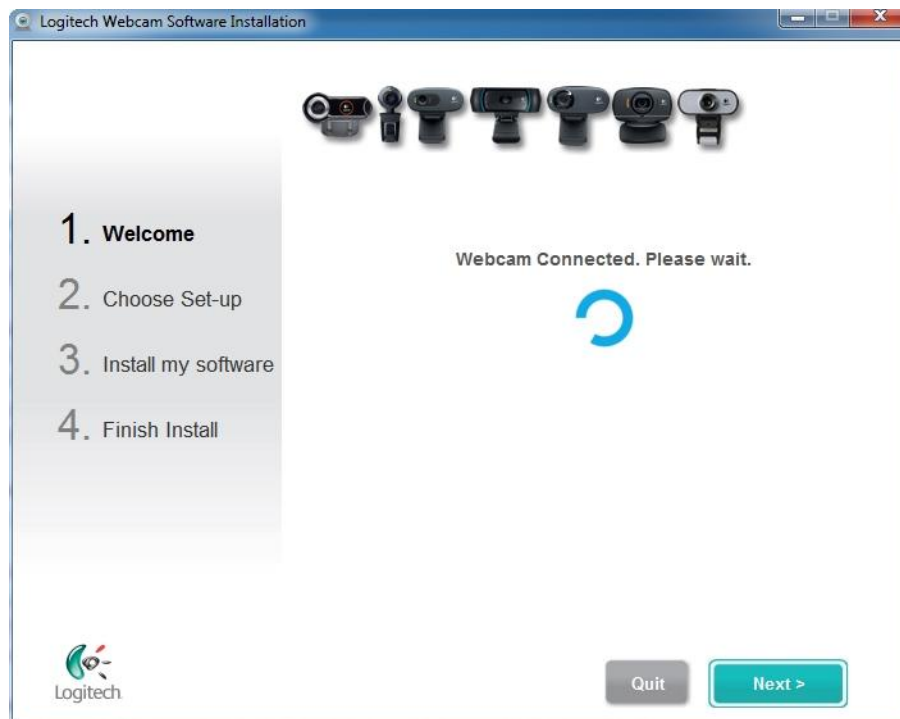


Figure 19

22. Once the software has recognized the camera click Next.

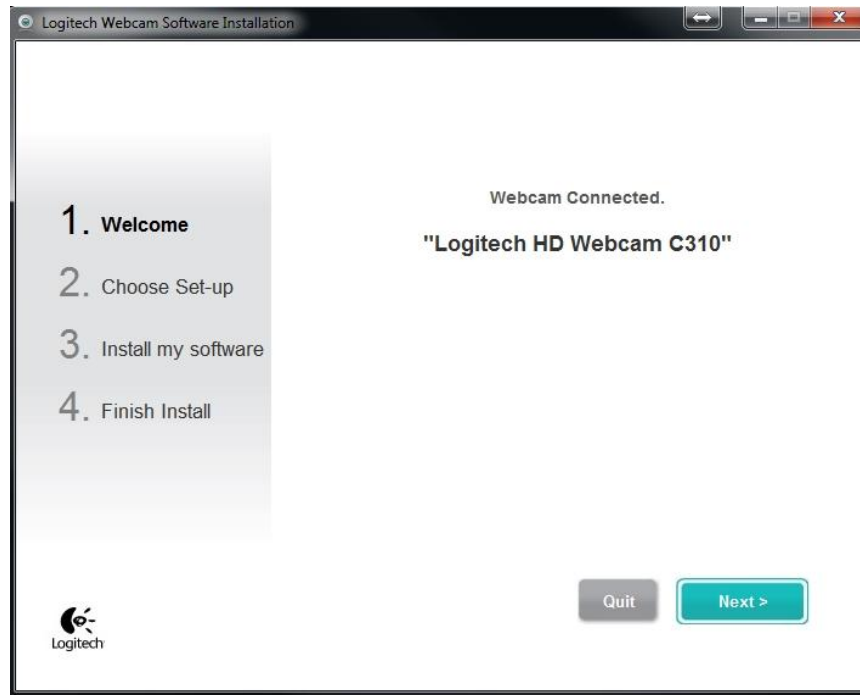


Figure 20

23. If the following screen is displayed just click Next to continue.

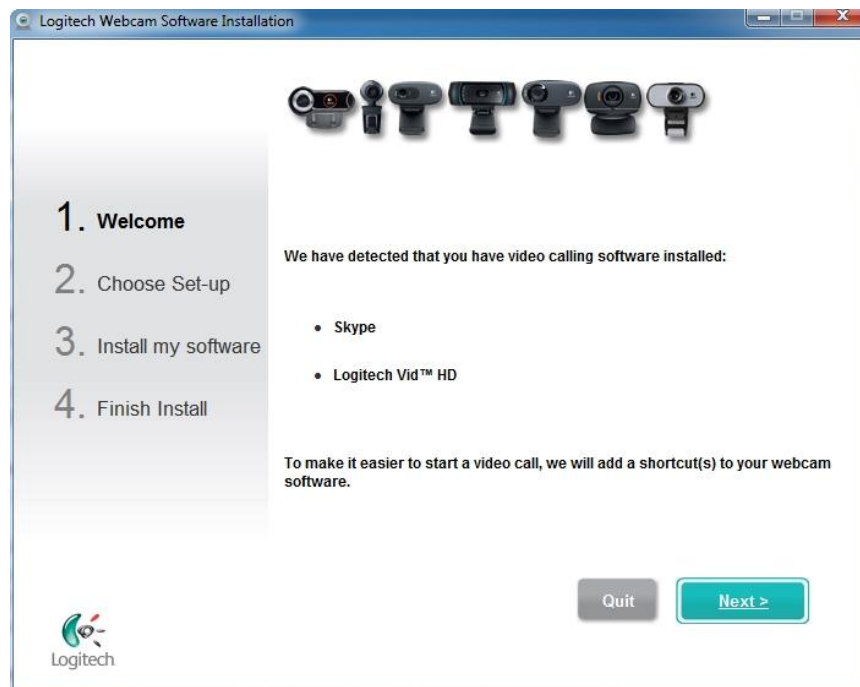


Figure 21

24. In this window you will select software to install. Ensure only Logitech Webcam Drivers is checked. Logitech Webcam Software should be unchecked. Click Next.

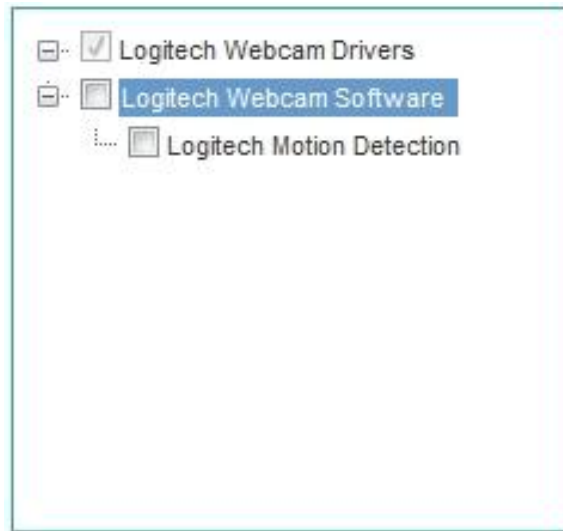


Figure 22

25. Please wait while the camera drivers are now loaded.

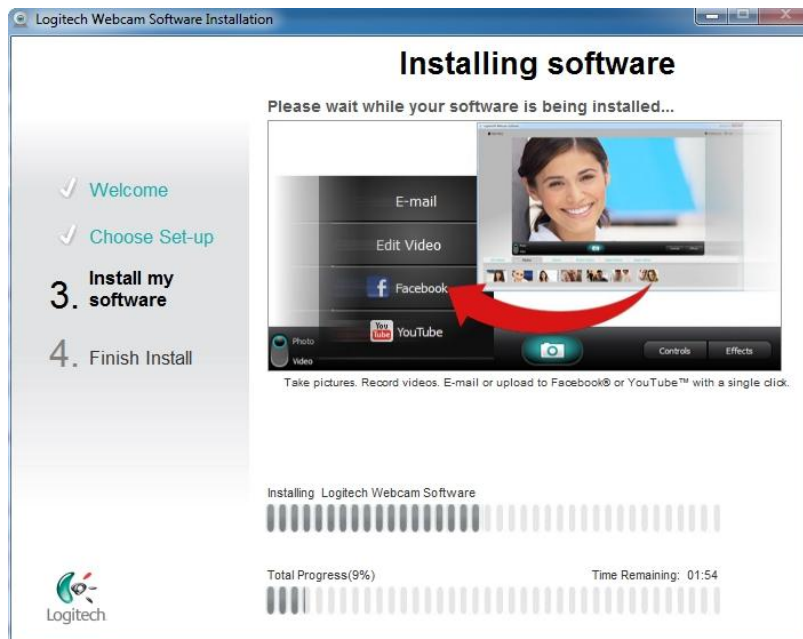


Figure 23

26. Confirm that the camera image is visible and click Next.

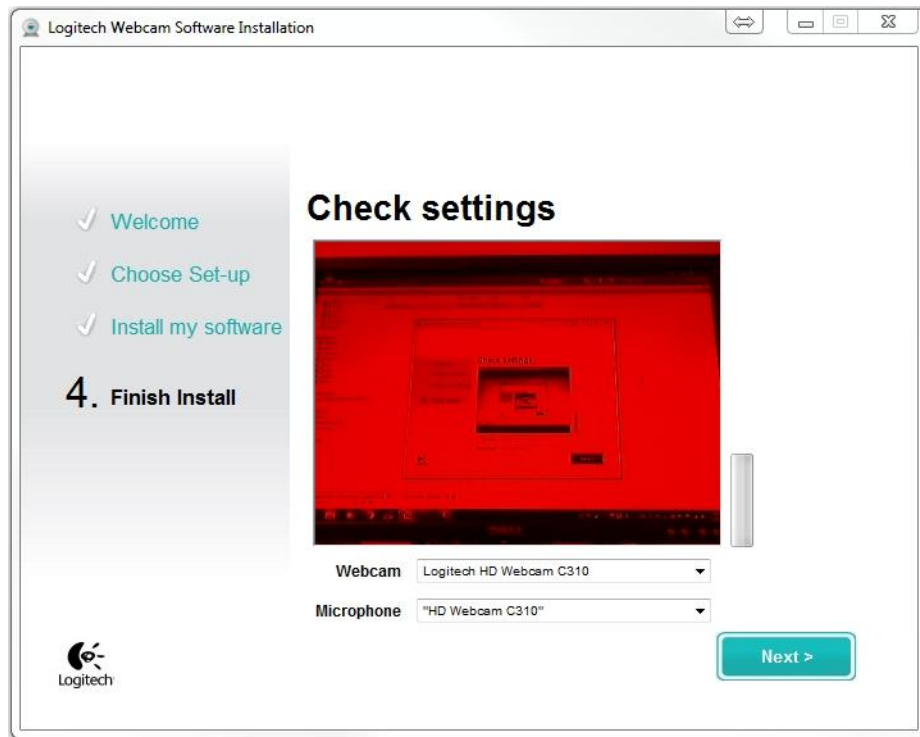


Figure 24

27. The camera driver installation is now complete, click Finish Up to finish and exit the installation.

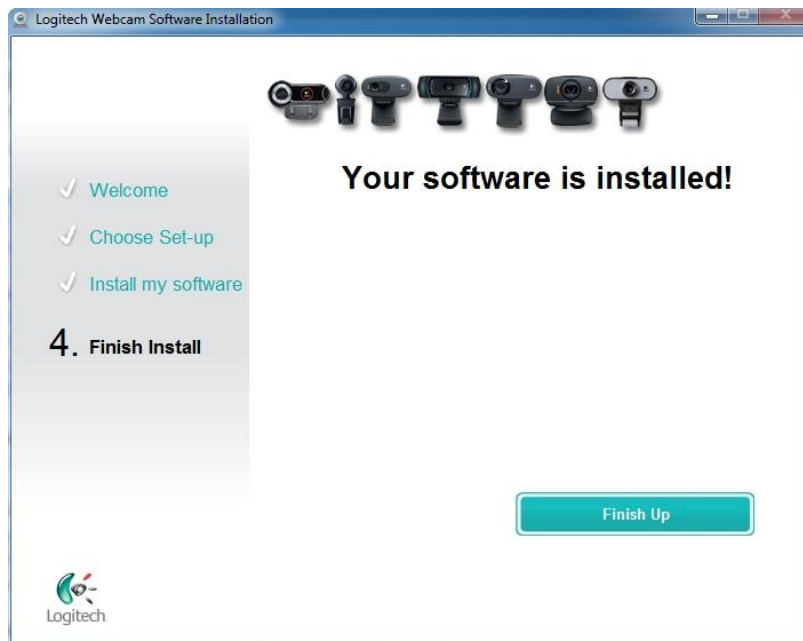


Figure 25

Using the STS System

This section will cover how to use the STS System and all of its features. Please make sure you have connected the Tracking Camera to a USB 2.0 port on your computer before proceeding. Your desktop screen resolution should be set to at least 1280 x 720.

Screen Filter Material

Computer screens and Flat Screen TVs have an anti-glare surface which will not reflect the training laser. This is overcome by attaching the included filter material to the screen which will properly reflect the training laser for the tracking camera to track it.

Measure and cut the material to fit your screen. Attach the filter with scotch tape to the bevel of the screen in each of the 4 corners. If you require a second piece in order to cover a larger screen it can be ordered from www.lasermarksman.com.



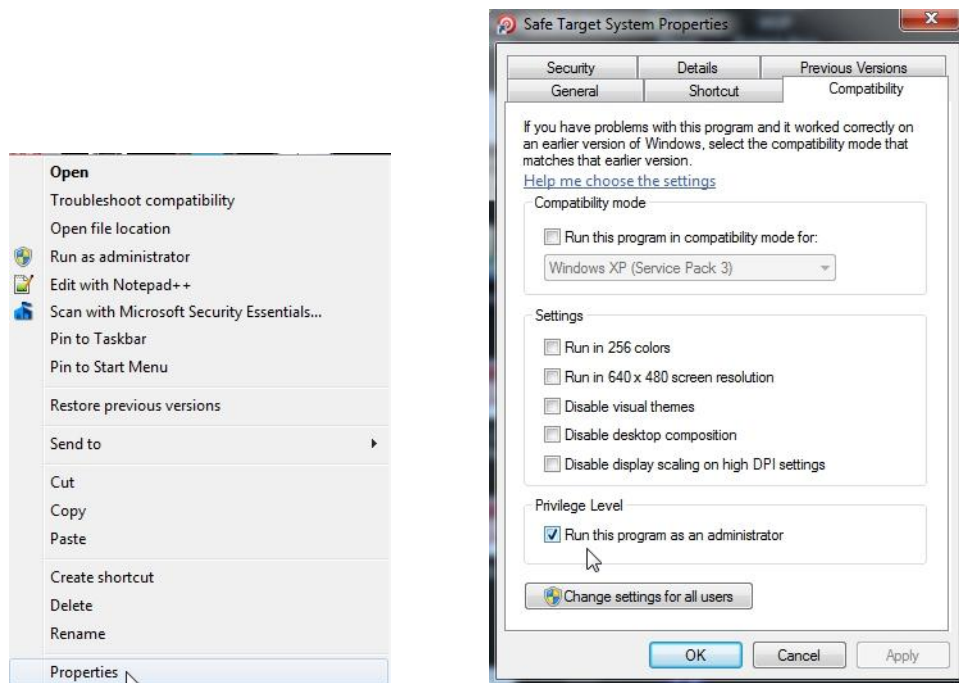
Figure 26

Safe Target Software

1. To ensure the STS runs correctly you must first set it to run as Administrator. Locate the Safe Target System icon on your computer desktop and right click it. At the bottom of the list, click on Properties. Select the Compatibility tab and place a check mark next to Run this program as an Administrator. Click Apply and then click OK to close the window.
2. Now, double click the STS icon on the desktop to launch the software.



Figure 27



3. The STS software will now launch full screen at a resolution of 1280 x 720.



Figure 28

4. The STS software opens on the Home screen. Here you will see 4 icons, Begin, Settings, Help and Quit.



Takes you to the target selection and training setup screen.

Takes you to the basic setting screen.

Displays operating instructions for the STS System.

Exits and closes the STS Software.

Settings

The settings screen allows you to setup some of the basic options that will apply to your training session.

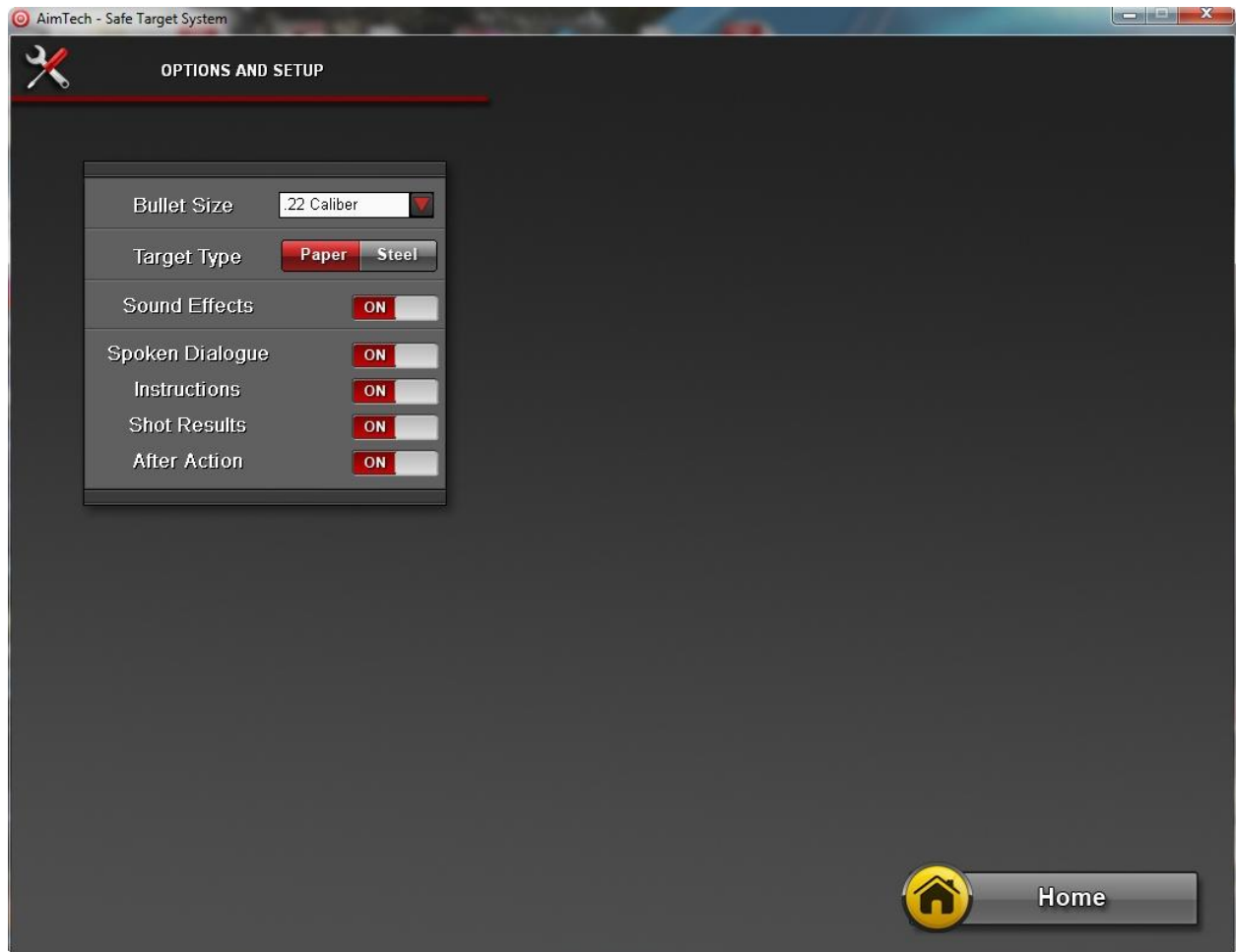


Figure 29

Bullet Size

Click in the drop down box to select which caliber bullet impact you would like to simulate on the target. The bullet impacts will show on the target screen as a red circle the size of the bullet selected. Two options are given that are not traditional bullet sizes, Micro Caliber and Crosshair. Micro Caliber is .06" and Crosshair is just that. These two sizes are offered to precisely show the center of your aim point when the trigger was pulled. Note: On larger screens these sizes will not be close to bullet actual size.



Figure 30

Target Type

Paper – No impact sound

Steel – Makes a steel impact sound when a bullet strikes any part of a target strike zone.

Sound Effects

When on, any sounds selected below will play. When off, no sounds at all will be played including steel target sounds.

Spoken Dialogue – Turns voice prompts and feedback on or off.

Instructions – Turns voice instructions on or off.

Shot Results – Turns voice feedback of shot scoring on or off.

After Action – Turns voice scoring results on or off.

Once you are done with the settings screen click on the Home button in the lower right corner to return to the Home screen.

Begin Training

From the Home screen click on the Begin button to start target practice.

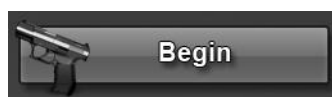


Figure 31

Training Setup

The Training Setup screen allows you to choose the target you would like to train on, calibrate the Tracking Camera and select the parameters you would like for Training.



Figure 32

Calibrate

Before training can begin the camera calibration must be run in order to align the camera to the screen. Ensure you have a feed in the camera preview window and click the Calibration button.



Figure 33

Align the camera so that the entire white outline displayed on your screen is visible in the camera view. Use the up and down arrow keys on your keyboard to adjust the brightness to look similar to the image below. When done click on the continue button.



Figure 34

The camera will now take a snapshot of the screen displaying only the white border and display it with a green box displayed over it. Move the mouse cursor over each corner of the green box and while holding down the left mouse button drag the corner to the corresponding of the white screen border in the snapshot. When done the green box should align completely with the white border. When done click Continue.



Figure 35

A note about Lighting: The STS System is designed to operate in normal room lighting as long as there is no direct light shining on the screen. It cannot be used in direct sun light as it will wash out the camera blinding it to the laser strike. Ensure no direct light sources such as a lamp or ceiling light are in direct view of the camera. Ensure there is no visible reflection of a light behind the camera reflecting in the screen. This will be seen as a bright blob in the camera view. Move or adjust the screen if any bright spots from reflected light are visible in the camera feed.

False Shot Correction - If at any time the system begins experiencing false shots, or shots that happen without a shot having been fired, exit the training session and exit back to the Setup Screen. While in the Setup Screen, hold down the Ctrl key and tap the down arrow key a couple of times until the false shots stop occurring. In the camera feed you will see the false shots displayed as yellow pluses in the camera feed.



Figure 36

Target Selection

Use the arrows to select the desired target for training.

Training Options

This allows you to choose a Training Mode.



Figure 37

Standard

In standard training mode you can manually set options such as Round Limit, Time Limit and a Start Tone.

Round Limit – This allows you to set the number of rounds allowed before a session is ended. In the off position unlimited rounds are allowed.

Time Limit – This allows you to set a time limit for a training session. In the off position time is unlimited.

Start Tone – This allows you to enable a delayed start tone before shooting can begin. The delay is 5 seconds.

Quick Draw

The quick Draw mode enables the correct settings for quick draw practice. When Quick Draw mode is selected the delayed start tone is engaged and only one round is allowed.

At the bottom of the Training Options section is a brief description of the currently selected options.

Reactive

The reactive mode enables certain targets to have knock down or pop up steel targets. The default mode is knock down. To enable pop-up targets turn Popup Targets On.

Rounds Needed - When turned on sets the number of rounds required to knock down a reactive target.

Time Limit - Sets the amount of time the targets will be presented.

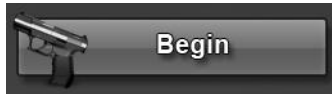
Start Tone - Sounds a start tone after a 5 second delay.

Popup Targets - When turned on targets will appear in a random order and present until shot or Face Time is up.

Face Time - When Popup targets is enabled the Time Limit option will change to Face Time. This sets how long each target will be presented before going away and presenting the next target.

Begin Training

When you have selected the desired options click the Begin button to start training.



You are now in the training screen. If you have Spoken Dialog turned on you will hear verbal instructions telling you to "Press Start Session to begin training."

At this time you can press Start Session when you are ready to begin training.

When you are done with the current session press any key or mouse click to Stop Session to allow for the ability to print and review the session results.

If you have set a round limit or time limit the session will end automatically if either are met.

The shots on the target are cleared when a new session is started.

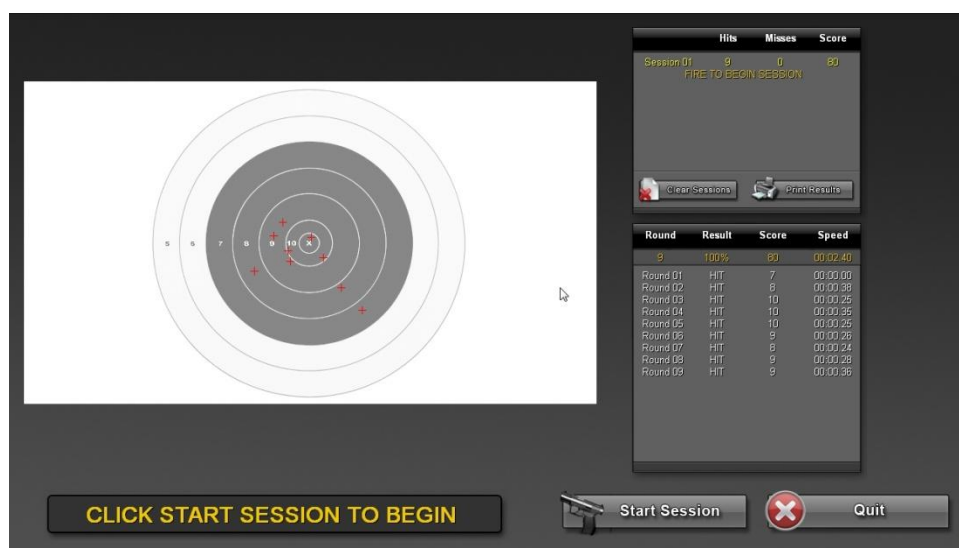


Figure 38

The After Action Review Screen consists of 3 sections:

Target Area – This displays the hit locations of all shots during the session.

Session List – In the upper right corner is the session list. This section shows a list of all sessions that have been finished along with the hits, misses and score for that session. A session consists of all target activity from when Start Session is pressed to when Stop Session is pressed. When all sessions have been ended you can select any of the sessions from the list to view the shots from that session. **This list of sessions is only available until the training screen is exited. Once the training screen has been exited all session information is cleared with no way to retrieve it. If you want to print a session's results it must be done before exiting the training screen.** In the Sessions List are two buttons, Clear Sessions and Print Results. Clear Sessions erases the list of Sessions and Print Results prints the results of the highlighted session.



Figure 39

Shot List – In the lower right corner is the Shot List. This shows a running list of all shots taken during a session. Once the session is ended you can mouse over any shot in the list and the corresponding shot on the target display will blink for easy identification. If more shots exist than can be displayed in the list

hold down the left mouse button in the list and drag the list up or down to see all shots. There are four columns of information displayed, Round, Result, Score and speed. Round shows the shot number in order fired. Result shows whether or not a shot struck a hit zone or not. Score shows the running total score at the top and the individual score for each shot. Speed displays the time between each shot and the last one.

When in Quick Draw mode the Speed column displays the time from the sound of the start tone to when the shot is fired on the target. If you have Spoken Dialogue enabled the time difference between the current session and the previous session will be announced.

A screenshot of a software interface displaying a table of shooting results. The table has four columns: Round, Result, Score, and Speed. The first row shows a summary: Round 3, Result 100%, Score 30, and Speed 00:05.13. Below this are three rows of individual shot data: Round 01 (HIT, 10, 00:00.00), Round 02 (HIT, 10, 00:03.41), and Round 03 (HIT, 10, 00:01.71). The background of the interface is dark grey.

Round	Result	Score	Speed
3	100%	30	00:05.13
Round 01	HIT	10	00:00.00
Round 02	HIT	10	00:03.41
Round 03	HIT	10	00:01.71

Figure 40

Once you have completed all training session press Quit to return to the Training Setup screen.

Exit the Software

To exit the software press Exit from the Home Screen.

Support

If you have any problems, questions or suggestions please shoot us an email at info@lasermarksman.com and we will respond as quickly as possible.

Thank You for purchasing the Safe Target System. We hope you will enjoy it as much as we do.